REMARKS

Claims 4-10 are pending in the present application. The Examiner's reconsideration of the claim rejections is respectfully requested in view of the following remarks.

Claim Rejections

Reconsideration of the rejections of claims 4-10 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,040,882 to Jun, in view of U.S. Patent 6,417,896 to Yamazaki, and further in view of U.S. Patent Publication 2002/0176030 to Matsumoto is respectfully requested.

Jun, Yamasaki, and Matsumoto, alone or in combination do not disclose or suggest *a transmissive electrode being formed in a first region of a pixel region and a reflective electrode formed in a second region of the pixel region*, as essentially recited in claim 4.

The Examiner contends electrodes 40b and 40a in FIG. 2 of Jun respectively disclose the *transmissive electrode and the reflective electrode.*

However, the Examiner has failed to provide any evidence to support this contention. For example, the Examiner does not provide citations to the specification of Jun showing electrodes 40b and 40a disclose a transmissive and a reflective electrode.

Indeed, Jun teaches that electrodes 40b and 40a are both transparent. Thus, unlike the reflective electrode of claim 1, electrode 40b and electrode 40a cannot be reflective electrodes. For example, Jun states (in col. 4, lines 40-44) "pixel electrodes 40a and 40b are arranged with a selected distance within the second region 90 … [and] … [e]ach pixel electrode is formed of a **transparent** conductive material such as indium tin oxide".

Yamasaki teaches (in FIG. 3F, FIG. 4F, and FIG. 5c) pixel electrodes 212, 213, 214, 328, and 424.

However, there is no teaching in Yamasaki of a pair of pixel electrodes of 212, 213, 214, 328, and 424 in a first and second region including a transmissive and reflective electrode. Indeed, Yamasaki only refers to pixel electrodes that are made of a transparent material. For example, Yamasaki states (in col. 6, lines 57-58) "[a]n indium tin oxide (ITO) film is ... etched to form a pixel electrode 328" and (in col. 8, lines 38-39) "[a]n ITO film … is etched to form a pixel electrode 424.

The Examiner contends that pixel electrodes 23 and 21 in FIG. 1 of Matsumoto respectively disclose the *transmissive electrode and the reflective electrode.*

However, the Examiner has failed to provide any evidence to support this contention. For example, the Examiner does not provide citations to the specification of Matsumoto showing electrodes 23 and 21 disclosing a transmissive and a reflective electrode.

Indeed, Matsumoto teaches that electrodes 23 and 21 are both made from reflective metals. Thus, unlike the transmissive electrode of claim 1, electrode 23 and electrode 21 cannot be transmissive electrodes. For example Matsumoto states (in paragraph [0087] "first pixel electrode 21 and first data line 22 both being made of Al, Mo, titanium (Ti)" and "a second pixel electrode 23 made of Al, Mo, Ti".

Jun, Yamasaki, and Matsumoto, alone or in combination also do not disclose or suggest, *a compensating wiring that is electrically connected to a first switching device* [connected to a gate line and a data line], *the same compensating wiring facing the reflective electrode and the transmissive electrode*, as recited in claim 4.

The Examiner concedes (in p. 3 of the Office Action) that "Jun differs from the claimed invention because he does not explicitly disclose a semiconductor device having a compensating wiring facing the reflective electrode and the transmission electrode".

Yamasaki teaches (in FIG. 5C) a capacitance line 206 facing a single pixel electrode 212 and a capacitance line 207 facing a single pixel electrode 213.

However, unlike the compensating wiring of claim 4, the capacitance lines 206/207 of Yamasaki do not face both pixel electrodes 212 and 213.

The Examiner suggests that the common electrode 9/common electrode wiring 4 and pixel electrodes 21 and 32 of Matsumoto discloses a compensating wire facing a reflective electrode and a transmissive electrode.

However, as discussed above, both pixel electrodes 21 and 23 of Matsuomoto are made of reflective materials. Thus, unlike the compensating wiring of claim 4, the common electrode 9/common electrode wiring 4 of Matsumoto do not face both a reflective electrode and a transmissive electrode.

Further, unlike the compensating wiring of claim 4, which is indirectly connected to a data line through the first switching device, the common electrode 9 of Matsumoto is insulated from its data lines. For example, FIG. 2 of Matsumoto shows an insulating layer 10 intervening between the common electrode 9 and data lines 22 and 24. Moreover, unlike the compensating wiring of claim 4, which is indirectly connected to a gate line through the first switching device, the common electrode wiring 4 of Matsumoto is insulated from its gate lines. For example, FIG. 3 of Matsumoto shows an insulating layer 10 intervening between the common electrode wiring 4 and a scanning line 8.

Thus, Jun, Yamasaki, and Matsumoto, alone or in combination do not disclose or suggest, *a compensating wiring that is electrically connected to a first switching device* [connected to a gate line and a data line], *the same compensating wiring facing the reflective electrode and the transmissive electrode*, as recited in claim 4.

Further, there would have been no motivation to combine the capacitive line 207 of Yamasaki with the common electrode 9/common electrode wiring 4 of Matsumoto because the functions of the capacitive line 207 and the common electrode 9/common electrode wiring 4 are different from each other. For example, Yamasaki teaches (in col. 9, lines 9-17) that the capacitive line 207 is used to create a capacitor 215 between the capacitive line 207 and pixel electrode 213 and Matsumoto teaches (in paragraph [0104]) the common electrode 9/common electrode wiring 4 is used to apply a transverse electric field to the liquid crystal 3 (see paragraph [0104] of Matsumoto).

Moreover, the compensating wiring of claim 4 enables a first voltage to be applied to the transmissive electrode and a second voltage that is lower than the first voltage to be applied to the reflective electrode. Thus, both a reflectivity of the reflective electrode and a transmissivity of the transmissive electrode may be enhanced simultaneously while the liquid crystal display apparatus maintains a uniform cell gap (see paragraphs 21-23 of U.S. Patent Publication 2006/0060849).

In contrast, Jun, Yamasaki and Matsumoto do not disclose a compensating wire that enables a first voltage to be applied to a transmissive electrode and a second voltage to be applied to a reflective electrode that is lower than the first voltage.

For at least the foregoing reasons, Jun, Yamasaki, and Matsumoto, alone or in combination also do not disclose or suggest, *a transmissive electrode being formed in a*

first region of a pixel region and *a* reflective electrode *formed in a second region of the pixel region* or *a compensating wiring that is electrically connected to a first switching device* [connected to a gate line and a data line], *the same compensating wiring facing the reflective electrode and the transmissive electrode*, as recited in claim 4. Thus, claim 4 is believed to be patentable over Jun, Yamasaki, and Matsumoto.

Claims 5-10 are believed to be patentable over Jun, Yamasaki, and Matsumoto at least by virtue of their dependence from claim 4.

Withdrawal of the rejections under 35 U.S.C. 35 U.S.C. 103(a) is respectfully submitted.

In view of the foregoing remarks, it is respectfully submitted that all the claims now pending in the application are in condition for allowance. Early and favorable reconsideration is respectfully requested.

Respectfully submitted,

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